

Title (en)
METHOD FOR OPERATING A PHOTOVOLTAIC SYSTEM COMPRISING AN ENERGY STORE AND A BIDIRECTIONAL CONVERTER FOR CONNECTION OF AN ENERGY STORE

Title (de)
VERFAHREN ZUM BETRIEB EINER PHOTOVOLTAIKANLAGE MIT ENERGIESPEICHER UND BIDIREKTIONALER WANDLER FÜR DEN ANSCHLUSS EINES ENERGIESPEICHERS

Title (fr)
PROCÉDÉ DE FONCTIONNEMENT D'UNE INSTALLATION PHOTOVOLTAÏQUE COMPRENANT UN ACCUMULATEUR D'ÉNERGIE ET UN CONVERTISSEUR BIDIRECTIONNEL POUR LA CONNEXION D'UN ACCUMULATEUR D'ÉNERGIE

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Application
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Priority
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Abstract (en)
[origin: WO2015063234A1] For the operation of a photovoltaic system (1) comprising an inverter (2), comprising a photovoltaic generator (3) connected to an input (7) of the inverter (2), wherein the inverter (2) presets an operating voltage of the photovoltaic generator (3) at the input (7) and is designed to track an operating voltage of maximum power from the photovoltaic generator (3), comprising an energy store (4) for electrical energy and comprising a bidirectional converter (5), via which the energy store (4), in parallel with the photovoltaic generator (3), is connected to the input (7) of the inverter (2), a time characteristic of the power output by the photovoltaic generator (3) is detected by the converter (5). In a compensation mode, the converter (5) is operated in such a way that it compensates for fluctuations in the power of the photovoltaic generator (3) with respect to a setpoint power flowing via the input (7) into the inverter (2) by virtue of said converter matching the power (PDC) which is output to the input (7) by said converter and is branched off from there in such a way that the sum of the power (PDC) of the converter (5) and the power (PPV) of the photovoltaic generator (3) is equal to the setpoint power (PSet). In a tracking mode, the converter (5) is operated in such a way that said converter enables tracking of the operating voltage of maximum power by the inverter (2). During running operation, the photovoltaic system (1), in which power is available from the photovoltaic generator (3), is repeatedly changed over between the compensation mode and the tracking mode.

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